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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,930	03/19/2004	Andrea Maria Jessee	M61.12-0587	8214
27366 7590 11/28/2007 WESTMAN CHAMPLIN (MICROSOFT CORPORATION) SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			EXAMINER RIDER, JUSTIN W	
			ART UNIT 2626	PAPER NUMBER
			MAIL DATE 11/28/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/804,930

Applicant(s)

JESSEE ET AL.

Examiner

Justin W. Rider

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17-24 is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15, 26-29, 31 and 32 is/are rejected.
- 7) ☒ Claim(s) 12, 16, 30 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1 Sheet</u> | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

1. In response to the Office Action mailed 12 June 2007, applicant submitted a response filed 14 September 2007, in which the applicant amended claims 1-2, 9, 11-17, 19, 22-23, 26 and 28-30 without adding new matter. Claim 25 has been cancelled.

***Information Disclosure Statement***

2. The information disclosure statement(s) (IDS) submitted on 26 September 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement.

***Response to Remarks***

3. Applicant's arguments with respect to claims 1 and 26 have been considered but are moot in view of the new ground(s) of rejection. Claims 2, 9-16 and 28-30 are also rejected under new grounds of rejection in view of amendments.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 8-11, 13-15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bass et al. (USPN 4,701,851)** referred to as **Bass '851** hereinafter in view of **Bass et al. (US Patent No. 4,672,571)** referred to as **Bass '571** hereinafter.

Claim 1: **Bass '851** discloses a method for identifying and verifying spelling of components within compound words, comprising:

i. receiving the compound word (Fig. 2, (10); col. 2, lines 55-56, *'in parsing compound words in which the input word is matched...'*);

ii. searching a lexicon for the compound word, the lexicon including word entries that are annotated with associated segmentation information indicative of whether the associated word can form a component of a compound word (col. 2, lines 56-58, *'input word is matched against dictionary words to determine...'*); and

iii. identifying the component words for the compound word based on the entries contained in the lexicon including annotated word entries (col. 2, lines 57-58, *'to determine if substrings [components] of the input word match with words in the dictionary.'*).

However **Bass '851** fails to but **Bass '571** does specifically disclose wherein a lexicon [table and dictionary] includes word entries along with segmentation information indicative of whether the associated word can form a component of a compound word (Abstract, *'A table of associated with the dictionary includes compound class information relative to each of the words stored therein;'* col. 9, claim 1, *'storing flags associated with words stored in said dictionary indicative of whether said words may participate in compounding...'*).

Characteristic labeling of words in a lexicon is a known technique for a plurality of implementations in order to associate a given piece of text (e.g. sentence, phrase, word,

phoneme, etc...) with certain characteristics beneficial to a particular processing operation. In this respect, a person of ordinary skill has good reason to pursue well known options within his or her technical knowledge to solve such a problem. If, in fact this option leads to the anticipated success, it is more than likely the overall product of ordinary skill and common sense than that of technical innovation. For this reason, it would have been obvious to one possessing ordinary skill in the art of compound word breaking and identification processing to seek a known technique to improve upon the efficiency of compound word part labeling as taught in **Bass '851**.

**Claim 2:** **Bass '851** discloses a method as per claim 1 above, further comprising:

i. matching a first word portion of the compound word with a first entry in the lexicon (col. 2, lines 57-58, *'to determine if substrings [components] of the input word match with words in the dictionary.'*); and

ii. matching a second word portion of the compound word with a second entry in the lexicon (col. 2, lines 63-65).

**Claim 3:** **Bass '851** discloses a method as per claim 2 above, further comprising matching additional portions of the compound word (col. 2, lines 63-65) until reaching a final character of the compound word (col. 3, lines 3-7, *'In practice, for compound words the combination of the longest substring and the remainder of characters beyond the longest substring constitutes two words in the great majority of cases.'*).

**Claim 4:** **Bass '851** discloses a method as per claim 3 above, further comprising generating a first hypothesis of the component words of the compound word, wherein the first hypothesis is a combination of the matched portions of the compound word (col. 4, lines 26-44).

**Claim 5:** **Bass '851** discloses a method as per claim 4 above, further comprising generating additional hypotheses of the component words of the compound word (col. 4, lines 6-26; col. 5, lines 29-36).

**Claim 8:** **Bass '851** discloses a method as per claim 5 above, wherein:

i. matching the first portion comprises matching characters in the compound word starting from a first character of the compound word (col. 5, lines 30-32, e.g. 'over' and 'overt'); and

ii. wherein matching the second portion comprises matching characters in the compound word starting from a first character that follows a last character of the first portion (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

**Claim 9:** **Bass '851** discloses a method as per claim 8 above, wherein matching the first portion further comprising:

i. searching the lexicon for a word entry that matches the first portion (col. 5, lines 31-32);

ii. if a match is found, analyzing the second portion for matches with word entries in the lexicon (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime');

iii. if a match is found for the second portion, generating hypotheses in a list of hypothesis, wherein the hypothesis is a combination of the first portion and the second portion (col. 6, lines 6-22).

**Claim 10:** **Bass '851** discloses a method as per claim 9 above, wherein if additional matches are found for the first and second portions in the lexicon, adding these matches as

alternative hypotheses to the list of hypotheses (col. 5, lines 30-32, e.g. 'over' and 'overt'; col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

Claim 11: **Bass '851** discloses a method as per claim 9 above, further comprising:

- i. adding the hypothesis to the list of hypotheses regardless of whether the word entry includes the segment indication (col. 6, lines 6-22); and
- ii. excluding a resulting trace as invalid at a final evaluation of hypotheses (col. 5, line 59 - col. 6, line 22 discloses wherein when it is determined that 'ime' is an invalid word, then the word 'overt' is omitted as a hypothesized alternative.).

However **Bass '851** fails to but **Bass '571** does specifically disclose wherein an entry is added to a list of hypotheses regardless of the segmentation information and wherein a word entry is further excluded based on segmentation information (col. 5, lines 39-47, '*while the information in Shadow Table 5 relative to "cuff" may have indicated that it could occur alone or in the last portion of a compound. Accordingly, while "cuffpants" would have verified using the Compound Parsing Algorithm 2, Word Decode Algorithm 3, and Dictionary 4, the information contained in the Shadow Table 5 indicates the unsuitability of compounding "cuff" and "pants" in this manner, and therefore, the Compound Parsing Algorithm 2 would not verify "cuffpants" to the Text Editor 1, ' [emphasis supplied].).*

Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Bass '571** in the method of **Bass '851** because **Bass '571** includes an efficient way of verifying the spelling of compound words within a text using a database which does not include an exhaustive list of all verifiable compounds (col. 1, lines 10-

20). This allows for a minimum amount of required storage all while still maintaining an excellent level of spelling verification quality.

Claim 13: **Bass '851** discloses a method as per claim 9 above, further comprising:

- i. returning to the first portion (col. 5, lines 64-68);
- ii. adding a character following the last character in the first portion to the first portion; repeating the steps of searching, generating, and analyzing (col. 5, lines 30-32, e.g. 'over' and 'overt'; col. 5, line 15 - col. 6, line 5, e.g. 'time' and 'ime');
- iii. if additional matching word entries [possible word choices derived from the compound word] are found for the first (e.g. for 'overtime', 'over' and 'overt' represent first portions and are subsequently added to the list) and second portions (e.g. for 'overtime', 'time' and 'ime' represent second portions and are subsequently added to the list [even in the event that 'ime' does not represent a valid choice.]) in the lexicon, adding associated words in these matching word entries as alternative hypotheses to the list of hypotheses (col. 5, lines 30-32, e.g. 'over' and 'overt'; col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime').

Claim 14: **Bass '851**, in view of **Bass '571** discloses a method as per claim 9 above, further comprising:

- i. prior to adding the hypothesis to the list of hypotheses, checking if the matching word entry in the lexicon for the first portion includes segment information indicating that the word associated with the matching word entry can be a component of a compound word (col. 5, lines 8-20, 'end of dict'; **Bass '571**, col. 9, claim 1, *'storing flags associated with words stored in said dictionary indicative of whether said words may participate in compounding...'* Thus



demonstrating that words do contain flags [segmentation information] alerting the system as to whether a said word is available for compounding.); and

ii. adding the hypothesis to the list of hypotheses only if the entry includes the segmentation information (col. 5, lines 8-20; **Bass '571**, col. 9, claim 1, *'storing flags associated with words stored in said dictionary indicative of whether said words may participate in compounding...'*).

Characteristic labeling of words in a lexicon is a known technique for a plurality of implementations in order to associate a given piece of text (e.g. sentence, phrase, word, phoneme, etc...) with certain characteristics beneficial to a particular processing operation. In this respect, a person of ordinary skill has good reason to pursue well known options within his or her technical knowledge to solve such a problem. If, in fact this option leads to the anticipated success, it is more than likely the overall product of ordinary skill and common sense than that of technical innovation. For this reason, it would have been obvious to one possessing ordinary skill in the art of compound word breaking and identification processing to seek a known technique to improve upon the efficiency of compound word part labeling as taught in **Bass '851**.

Claim 15: **Bass '851**, in view of **Bass '571** discloses a method as per claim 14 above, wherein if the second portion includes a portion, which is a non-final portion, checking if matching word entries for the non-final portion includes the segmentation information (**Bass '571**, col. 9, claim 1, *'storing flags associated with words stored in said dictionary indicative of whether said words may participate in compounding...'*); and adding the hypothesis to the list of hypotheses only if the matching word entries for all non-final segments include the segmentation information.

**Bass '851** discloses that, 'for compounds consisting of more than two constituent words, the entire process may be applied recursively to each remainder;' (col. 6, lines 20-22) and so therefore, the above limitations, which are similar to that of claims 9 and 11, are possible for additional segments.

Characteristic labeling of words in a lexicon is a known technique for a plurality of implementations in order to associate a given piece of text (e.g. sentence, phrase, word, phoneme, etc...) with certain characteristics beneficial to a particular processing operation. In this respect, a person of ordinary skill has good reason to pursue well known options within his or her technical knowledge to solve such a problem. If, in fact this option leads to the anticipated success, it is more than likely the overall product of ordinary skill and common sense than that of technical innovation. For this reason, it would have been obvious to one possessing ordinary skill in the art of compound word breaking and identification processing to seek a known technique to improve upon the efficiency of compound word part labeling as taught in **Bass '851**.

**Claim 26:** **Bass '851** discloses a computer-readable medium for identifying and verifying spelling of components within compound words, comprising:

- i. searching a lexicon for the compound word (col. 2, lines 56-58, '*input word is matched against dictionary words to determine...* '); and
- ii. identifying the component words for the compound word based on entries contained in the lexicon (col. 2, lines 57-58, '*to determine if substrings [components] of the input word match with words in the dictionary.* ').
- iii. determining if each of the component words is used correctly (Abstract, '*If the*

*remainder is not found in the dictionary, successively shorter initial substrings are accessed to yield successively longer remainders'); and*

iv. if at least one of the identified component words is used incorrectly indicating that the compound word includes a spelling error (Abstract *'The word is considered correctly spelled if both a substring and a remainder are found in the dictionary. This technique is applied recursively so that multiple-piece compounds can also be found.'*).

However **Bass '851** fails to but **Bass '571** does specifically disclose wherein a lexicon [table and dictionary] includes word entries along with segmentation information indicative of whether the associated word can form a component of a compound word (Abstract, *'A table of associated with the dictionary includes compound class information relative to each of the words stored therein;'* col. 9, claim 1, *'storing flags associated with words stored in said dictionary indicative of whether said words may participate in compounding...'*) and wherein an entry is added to a list of hypotheses regardless of the segmentation information and wherein a word entry is further excluded based on segmentation information (col. 5, lines 39-47, *'while the information in Shadow Table 5 relative to "cuff" may have indicated that it could occur alone or in the last portion of a compound. Accordingly, while "cuffpants" would have verified using the Compound Parsing Algorithm 2, Word Decode Algorithm 3, and Dictionary 4, the information contained in the Shadow Table 5 indicates the unsuitability of compounding "cuff" and "pants" in this manner, and therefore, the Compound Parsing Algorithm 2 would not verify "cuffpants" to the Text Editor 1,* [emphasis supplied].).

Characteristic labeling of words in a lexicon is a known technique for a plurality of implementations in order to associate a given piece of text (e.g. sentence, phrase, word,

phoneme, etc...) with certain characteristics beneficial to a particular processing operation. In this respect, a person of ordinary skill has good reason to pursue well known options within his or her technical knowledge to solve such a problem. If, in fact this option leads to the anticipated success, it is more than likely the overall product of ordinary skill and common sense than that of technical innovation. For this reason, it would have been obvious to one possessing ordinary skill in the art of compound word breaking and identification processing to seek a known technique to improve upon the efficiency of compound word part labeling as taught in **Bass '851**.

Therefore it would have been further obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Bass '571** in the method of **Bass '851** because **Bass '571** includes an efficient way of verifying the spelling of compound words within a text using a database which does not include an exhaustive list of all verifiable compounds (col. 1, lines 10-20). This allows for a minimum amount of required storage all while still maintaining an excellent level of spelling verification quality.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bass '851**, in view of **Bass '571** and in further in view of **Logan et al. (US 2003/0187649 A1)** referred to as **Logan** hereinafter.

Claim 6: **Bass '851**, in view of **Bass '571** discloses a method as per claim 5 above, however failing to, but **Logan** does specifically disclose ranking each identified hypothesis based on a relative likelihood [probability] of being a correct representation of a word (p. 2, paragraph [0026], *The search results include the probability of the alternative input word or*

*phrase and/or the probability of a proximate match. The electronic documents are re-ranked according to the augmented score. ').*

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Logan** in the system of **Bass '851**, in view of **Bass '571** because it advantageously provides multiple forms of alternative corrections that are not governed by a limited fixed vocabulary set (paragraphs [0008]-[0009]).

Claim 7: **Bass '851**, in view of **Bass '571** and **Logan** discloses a method as per claim 6 above, further disclosing wherein ranking is based on data obtained through statistical analysis (**Logan**, p. 2, paragraph [0026], *'The search results include the probability of the alternative input word or phrase and/or the probability of a proximate match. The electronic documents are re-ranked according to the augmented score. ').*

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Logan** in the system of **Bass '851**, in view of **Bass '571** because it advantageously provides multiple forms of alternative corrections that are not governed by a limited fixed vocabulary set (paragraphs [0008]-[0009]).

7. Claims 27-29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bass '851**, in view of **Bass '571** in view of **Schabes et al. (USPN 6,424,983)** referred to as **Schabes** hereinafter.

Claim 27: **Bass '851**, in view of **Bass '571** discloses a method as per claim 26 above, however failing to, but **Schabes** does specifically disclose generating a spelling suggestion for a compound word (Fig. 14; col. 4, lines 35-38, *'The system determines alternative words for the*

*input word, the alternative words including at least one compound word which is comprised of two or more separate words. ').*

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass '851**, in view of **Bass '571** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Claim 28: **Bass '851**, in view of **Bass '571** discloses a method as per claim 26 above, wherein determining if each component word is used correctly comprises:

i. if the component word is not the last component word in the compound (e.g. 'over, 'overt'), checking if the indicator for the entry matching the component word indicates that the word in the matched entry can be a component of a compound word (**Bass '571**, col. 9, claim 1, '*storing flags associated with words stored in said dictionary indicative of whether said words may participate in compounding...*' Thus demonstrating that words do contain flags [segmentation information] alerting the system as to whether a said word is available for compounding. Also, for the word 'overtime', **Bass '851** omits components such as 'ov' and 'ove' due to a lack of segmentation.);

ii. if the component word cannot be a component of a compound word, applying spelling transition rules to the component word (col. 2, lines 63-66, '*The remainder of the input word, beginning with the next character beyond the last character of the longest matching substring, is then compared with the dictionary.*' ); and

iii. rechecking if the new component word is in the lexicon with the segment identifier (col. 2, line 66 - col. 3, line 2, *'If it is not in the dictionary, the system recalls the next-longest substring and the remainder of the input word beyond this next-longest substring is tested for a match with the dictionary words.'*).

Claim 29: **Bass '851** discloses a method as per claim 28 above, however failing to, but **Schabes** does specifically disclose wherein if applying speller transition rules results in too many unwanted lexical matches, further comprising the possibility of searching the entries in the lexicon for the component word to identify variations of the component word that include the segment identifier generating new compound words that include the identified variations of the component word and presenting those new compound words as the spelling suggestion to the user (col. 9, lines 2-10, *'Spelling suggestion module 52 also identifies portions (e.g., characters) of the misspelled word which sound substantially similar to portions of correctly-spelled alternative words in order to obtain additional correctly-spelled alternatives words. Once all alternative words have been determined, spelling suggestion module 52 ranks these words in a list.'*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass '851** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Claim 31: **Bass '851** discloses a method as per claim 26 above, however failing to, but **Schabes** does specifically disclose wherein applying speller transition rules in the compound

word includes adding additional characters to the component word that are not present in the compound word (col. 8, line 65 - col. 9, line 2, *'For now, suffice it to say that spelling suggestion module 52 determines this list of alternative words by inserting, deleting, replacing, and/or transposing characters in the misspelled word until correctly-spelled alternative words are obtained.'* [emphasis supplied]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass '851** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).

Claim 32: **Bass '851** discloses a method as per claim 26 above, however failing to, but **Schabes** does specifically disclose wherein applying speller transition rules in the compound word includes changing characters comprising the component word (col. 8, line 65 - col. 9, line 2, *'For now, suffice it to say that spelling suggestion module 52 determines this list of alternative words by inserting, deleting, replacing, and/or transposing characters in the misspelled word until correctly-spelled alternative words are obtained.'* [emphasis supplied]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the teachings of **Schabes** in the method of **Bass '851** because it addresses incorrect word usage as well as misspelled words, which is a common problem with the use of compound words and is useful in a variety of implementations (e.g. word processing, machine translation, text indexing and retrieval, and optical character recognition) (col. 2, lines 33-63).



*Allowable Subject Matter*

8. Claims 17-24 are allowed. The following is a statement of reasons for the indication of allowable subject matter: **Bass '851**, in view of **Bass '571** discloses i. receiving the compound word (Fig. 2, (10); col. 2, lines 55-56, *'in parsing compound words in which the input word is matched...'*); ii. searching a lexicon for the compound word (col. 2, lines 56-58, *'input word is matched against dictionary words to determine...'*); iii. identifying the component words for the compound word based on entries contained in the lexicon (col. 2, lines 57-58, *'to determine if substrings [components] of the input word match with words in the dictionary.'*) iv. matching a second portion of the compound word with a second entry in the lexicon (col. 2, lines 63-65) along with associating word entries with annotated segmentation information as discussed further in the rejection of claim 1 above. However, the prior art discussed fails to disclose if either the first or second portions of the compound word match words in the entries in the lexicon, word match words in the entries the lexicon, but the associated segmentation indicator in either of the matched entries indicates that the associated word cannot be a component of a compound word, then searching for a variation of the associated word in the lexicon that has a segmentation indicator indicating the variation can be a component of a compound word.

Claims 18-24 are also allowable for at least further limiting the scope of independent claim 17.

9. Claims 12, 16 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Bass '851**, in view of **Bass '571** discloses a method as per claim 26 above, wherein determining if each component word is used correctly comprises if the component word is the last component word in the compound, checking if the component word has an anti-segment identifier (col. 5, line 59 - col. 6, line 5, e.g. 'time' and 'ime'); however, failing to specifically disclose, alone or in combination with other prior art references (**Schabes**, etc...), if the component word has the anti-segment identifier searching the entry in the lexicon for the component word to identify variations that do not include the anti-segment identifier; and if a variation of the component word does not include the anti-segment identifier, suggesting that variation of the component word as the spelling suggestion for the compound word.

Claims 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Bass '851**, in view of **Bass '571** and **Schabes** discloses a method including the addition, removal, and/or changing of characters within compound words when advised to perform spelling transitions. However, the prior art fails to recite wherein presenting spelling suggestions presents the spelling suggestions only when applying speller transition rules adds, removes, or changes no more than two characters to the word as well as only providing spelling suggestions if and only if no more than two component words in the compound word required correction. Such limitations might be implied or assumed in prior art references; however the specific disclosure of the above limitations is not present.

*Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin W. Rider whose telephone number is (571) 270-1068. The examiner can normally be reached on Monday - Friday 7:30AM - 5:00PM.

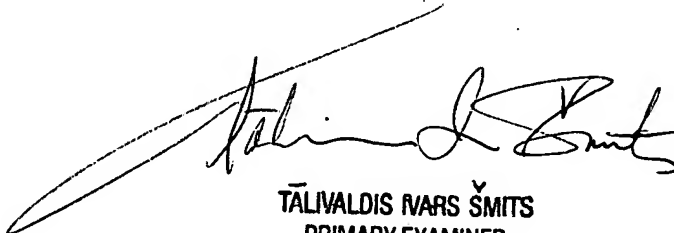
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/804,930  
Art Unit: 2626

Page 19

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J.W.R.  
20 November 2007



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PRIMARY EXAMINER